



**Johnson Space Center
Procedural
Requirements**

JPR No.: 1281.8
Effective Date: 01/29/2008
Expiration Date: 01/29/2013
(Formerly SLP 4.8)

Verify that this is the correct version before use

Compliance is Mandatory

Product Identification and Traceability

(Change 1 approved 2/18/09)

Responsible Office: Safety and Mission Assurance Directorate

Product Identification and Traceability, Change 1 (Formerly SLP 4.8)	JPR No.	1281.8
	Effective Date:	01/29/2008
	Expiration Date:	01/29/2013
	Page Number	Page 1 of 11

TABLE OF CONTENTS

CHANGE HISTORY LOG	2
P. PREFACE.....	3
P.1 PURPOSE	3
P.2 APPLICABILITY.....	3
P.3 AUTHORITY	3
P.4 APPLICABLE DOCUMENTS.....	3
P.5 MEASUREMENT VERIFICATION:.....	3
P.6 CANCELLATION / RESCISSION:	3
1.0 RESPONSIBILITIES.....	5
1.1 DIRECTORATE LEVEL ORGANIZATION (DLO)	5
1.2 DIVISION MANAGER (DM)	5
1.3 PRODUCT LEAD (PL).....	5
1.4 PROCESS OPERATOR (PO).....	5
1.5 QUALITY ASSURANCE SPECIALIST (QAS).....	6
2.0 PRODEDURE.....	6
2.1 PRODUCT IDENTIFICATION (PI).....	6
2.2 PRODUCT TRACEABILITY.....	6
APPENDIX A: TERMS AND DEFINITIONS	7
APPENDIX B SLP 4.8 CHANGE RECORD	9

Product Identification and Traceability, Change 1 (Formerly SLP 4.8)	JPR No.	1281.8
	Effective Date:	01/29/2008
	Expiration Date:	01/29/2013
	Page Number	Page 2 of 11

Change History Log

Revision	Date	Originator	Description of Changes
Change 1	2/18/09		Appendix A updated to add missing definitions.
Baseline	July, 2007	NT/Daniel J. Myles 281-483-3201	Initial Release. Previously numbered as SLP 4.8, converted to JPR numbering and template, and placed under control of the JSC Document Management System (JDMS) Update to include requirements from AS9100 section 7.5.3.

Product Identification and Traceability, Change 1 (Formerly SLP 4.8)	JPR No.	1281.8
	Effective Date:	01/29/2008
	Expiration Date:	01/29/2013
	Page Number	Page 3 of 11

P. PREFACE

P.1 PURPOSE

The purpose of this JSC Procedural Requirement (JPR) is to establish the requirements for product identification and traceability for products under the control of the JSC quality system.

P.2 APPLICABILITY

This JPR is applicable to all JSC NASA organizations, including Ellington Field, and the Sonny Carter Training Facility, except for the following:

- a) White Sands Test Facility,
- b) Office of Inspector General,
- c) NASA Safety Engineering Center

JSC directives may apply to contractors or grant recipients only to the extent specified or referenced in the appropriate contracts, grants, or agreements.

P.3 AUTHORITY

JPD 1280.1, Quality Policy
JPR 1280.2, Quality Manual

P.4 APPLICABLE DOCUMENTS

JPR 1281.1, Management Responsibility
JPR 1281.9, Process Control
JPR 1281.13, Control of Nonconforming Product
JPR 1281.15, Identification, Handling, Storage, Packaging, Preservation, and Delivery
JPR 1281.17, *JSC Audits*
JPR 1440.3, JSC Files and Records Management Procedures
JSC 26549, Control of Program Stock
AFM 67-1, U.S. Air Force Supply Manual

P.5 MEASUREMENT VERIFICATION:

- A. Processes and procedures shall be measured and monitored as prescribed by JPR 1281.9.
- B. Audits, as prescribed in JPR 1281.17, shall be used to verify conformance with requirements.
- C. Results shall be reviewed by Directorates and the Center as prescribed by JPR 1281.1.

P.6 CANCELLATION / RESCISSION:

JSC System Level Procedure 4.8, Revision B, dated February, 1999, *Product Identification and Traceability*

Original Signed By:

H. Lawrence Dyer
Manager, Management Integration Office

Product Identification and Traceability, Change 1 (Formerly SLP 4.8)	JPR No.	1281.8
	Effective Date:	01/29/2008
	Expiration Date:	01/29/2013
	Page Number	Page 4 of 11

Distribution:
JDMS

Product Identification and Traceability, Change 1 (Formerly SLP 4.8)	JPR No.	1281.8
	Effective Date:	01/29/2008
	Expiration Date:	01/29/2013
	Page Number	Page 5 of 11

1.0 RESPONSIBILITIES

1.1 Directorate Level Organization (DLO)

1.1.1 The DLO shall ensure that product is identified by suitable means throughout its lifecycle in accordance with customer and/or regulatory requirements.

1.1.2 Where traceability is a customer and/or regulatory requirement, the DLO shall ensure that the organization controls and records the unique identification of the product in accordance with JPR 1440.3.

1.1.3 For critical and complex hardware, the DLO shall ensure that the following additional requirements are met:

- a) The organization maintains the identification of the configuration of the product in order to identify any differences between the actual configuration and the agreed configuration.
- b) According to the level of traceability required, the organization provides for:
 - (1) Identification to be maintained throughout the product life;
 - (2) All of the products manufactured from the same batch of raw material or from the same manufacturing batch to be traced, as well as the destination (delivery and scrap) of all products of the same batch;
 - (3) An assembly, the identity of its components, and those of the next higher assembly to be traced;
 - (4) For a given product, a sequential record of its production (manufacture, assembly, inspection) to be retrievable.

1.2 Division Manager (DM)

The DM with overall responsibility for the product shall establish product identification and traceability procedures that are compliant with requirements defined in this JPR, customer requirements and/or regulatory requirements. Configuration management is a means by which identification and traceability may be maintained. Regulatory requirements for aircraft are contained in AFM 67-1, U.S. Air Force Supply Manual. Customer requirements for Class I and Class II products and Ground Support Equipment (GSE) are defined in JSC 26549 Control of Program Stock.

1.3 Product Lead (PL)

The PL shall ensure compliance with product identification and traceability procedures. Depending on the nature of the product, the PL may be the lead engineer, laboratory or facility manager, or supervisor of the project.

1.4 Process Operator (PO)

The PO performs functions required for product development and/or production and is responsible for maintaining product identification and traceability throughout the functional process.

Product Identification and Traceability, Change 1 (Formerly SLP 4.8)	JPR No.	1281.8
	Effective Date:	01/29/2008
	Expiration Date:	01/29/2013
	Page Number	Page 6 of 11

1.5 Quality Assurance Specialist (QAS)

When independent verification of product identification and traceability is required, the QAS is responsible for verifying that the products are identified as specified and that product identification and traceability are maintained throughout all phases of product processes.

2.0 PRODEDURE

2.1 Product Identification (PI)

- 2.1.1 The DM shall develop and establish work instructions that define product identification and traceability procedures for different product types.
- 2.1.2 The PL shall provide product identification and traceability procedure(s) to process operators.
- 2.1.3 The PO shall identify product in accordance with this JPR and DM-established work instructions.
- 2.1.4 If independent PI is required, the QAS shall ensure that product is identified in accordance with this JPR, customer requirements, work instructions and regulatory requirements for aircraft, as applicable.
- 2.1.5 When a discrepancy report is initiated in accordance with JPR 1281.13, Control of Nonconforming Product, the QAS shall properly identify nonconforming product in accordance with established work instructions.
- 2.1.6 When a product with PI requirements is installed in a higher assembly with PI requirements, the PO shall transcribe PI and applicable traceability information to other applicable records, e.g., test preparation sheets, acceptance data package, or electronic database.
- 2.1.7 The PO shall properly identify packages containing the product in accordance with JPR 1281.15 and applicable work instructions before shipping the product.

2.2 Product Traceability

- 2.2.1 DMs shall develop and establish work instructions for tracking and maintaining product traceability in accordance with this JPR, customer requirements and/or regulatory requirements for aircraft, as applicable..
- 2.2.2 PLs shall develop unique product traceability identifiers such as lot, batch, serial, and/or release numbers where traceability is a specified requirement.
- 2.2.3 The PO shall maintain product traceability documentation from receipt and during all stages of, production, assembly, testing, delivery, and/or installation in accordance with JPR 1440.3.
- 2.2.4 When independent product traceability verification is required, the QAS shall verify that traceability of all controlled JSC products is maintained from receipt and during all stages of production, assembly, testing, delivery, and/or installation.

3.0 RECORDS

Product identification and traceability documentation – retained by process operator organization.

Product Identification and Traceability, Change 1 (Formerly SLP 4.8)	JPR No.	1281.8
	Effective Date:	01/29/2008
	Expiration Date:	01/29/2013
	Page Number	Page 7 of 11

APPENDIX A: TERMS AND DEFINITIONS (CHANGE 1)

TERM	DEFINITION
Class I equipment	Equipment acceptable for space flight use (controlled flight equipment).
Class II equipment	Equipment acceptable for use in ground tests or training in a hazardous environment (controlled nonflight equipment).
Class III equipment	Equipment acceptable for non-hazardous training or display purposes. (Nonflight Equipment)
Class IIIW equipment	Equipment acceptable for use in Water Immersion training in a hazardous environment (controlled nonflight equipment)
Ground Support Equipment (GSE)	Non-flight equipment designed and certified with a physical and/or functional interface with flight hardware that is required for the handling, servicing, inspection, testing, maintenance, alignment, adjustment, checkout, repair or overhaul of Class I or Class II products.
JSC identification decal (JSC Form 1106)	A decal used in conjunction with a JSC project parts tag (JSC Form 911) to record product and configuration identification information when product properties (size, shape, and/or material properties) do not permit direct marking of the product. The identification decal is applied to the package containing the product.
JSC project discrepant parts tag (JSC Form 911R)	A tag used in conjunction with the JSC Form 911 to identify nonconforming product.
JSC project parts tag (JSC Form 911)	A tag used to identify JSC-controlled products. The tag is attached to the product or its packaging and identifies the product by part name, P/N, and serial, lot, or batch number.
Non-flight equipment	Equipment used to aid in the processing, maintaining, testing, repairing, etc., of the flight equipment and all its systems. Non-flight equipment is comprised of GSE, Class II, III, IIIW, commercial tools, special test equipment, special test devices, and element tools.
Product	The results of activities or processes. A product may include service, hardware, processed materials, software, or a combination thereof.
Product identification	A method used to distinguish between products by a unique number, part number (P/N), configuration identification, and/or serial, lot, or batch number assigned to each part.
Product traceability	The ability to trace the history, application or location of an entity by means of recorded identifications.
Special Test Equipment/Devices (STE/D)	STE/D are similar to GSE but have not had design and certification reviews. This equipment may be used in support of class I, II, IIIW and GSE checkout and service <u>but</u> will not directly interface with flight hardware.
Class I equipment	Equipment acceptable for space flight use (controlled flight equipment).
Class II	Equipment acceptable for use in ground tests or training in a hazardous

Product Identification and Traceability, Change 1 (Formerly SLP 4.8)	JPR No.	1281.8
	Effective Date:	01/29/2008
	Expiration Date:	01/29/2013
	Page Number	Page 8 of 11

TERM	DEFINITION
equipment	environment (controlled nonflight equipment).
Ground Support Equipment (GSE)	Non-flight equipment designed and certified with a physical and/or functional interface with flight hardware that is required for the handling, servicing, inspection, testing, maintenance, alignment, adjustment, checkout, repair or overhaul of Class I or Class II products.
Product	The results of activities or processes. A product may include service, hardware, processed materials, software, or a combination thereof.
Product identification	A method used to distinguish between products by a unique number, part number (P/N), configuration identification, and/or serial, lot, or batch number assigned to each part.
Product traceability	The ability to trace the history, application or location of an entity by means of recorded identifications.

Product Identification and Traceability, Change 1 (Formerly SLP 4.8)	JPR No.	1281.8
	Effective Date:	01/29/2008
	Expiration Date:	01/29/2013
	Page Number	Page 9 of 11

APPENDIX B SLP 4.8 CHANGE RECORD

Rev.	Date	Originator/Phone	Description
Basic	03/06/97	Daniel Myles	Initial Release
A	12/12/97	Daniel Myles	<p>Delete from 2 SCOPE; “all” and “developed”.</p> <p>Delete from REFERENCES; JSC 26549, ND-QA-001, ND-QA-002, ND-QA-025, ND-QA-027, ND-QA-028, ND-QA-029, ND-QA-036 AND AFM 67-1 U.S. Air Force Supply Manual.</p> <p>Delete from 4 QUALITY RECORDS AND FORMS; JSC FORM 911 JSC Project Parts Tag; JSC Form 911R JSC Project Discrepant Parts Tag; JSC Form 1106 Identification Decal; JSC Form 2176 Discrepancy Report/ Material Review Record.</p> <p>Add to 4 QUALITY RECORDS AND FORMS; “will be identified in work instructions”.</p> <p>Delete from 5 DEFINITIONS; “A product can be tangible (e.g., assemblies or processed materials) or intangible (e.g., knowledge or concepts), or a combination thereof.”</p> <p>Add to 7 PROCEDURE 7.1.3; “for aircraft (AFM 67-1 U.S. Air Force Supply Manual)”.</p> <p>Add to 7 PROCEDURE 7.1.3; “and Ground Support Equipment”</p> <p>Add to 7 PROCEDURE 7.1.4; “for aircraft.”</p> <p>Add to 7 PROCEDURE 7.2.1; “for aircraft”.</p> <p>Delete from 7 PROCEDURE 7.2.3 “or conception” and “development, analysis”</p> <p>Delete from 7 PROCEDURE 7.2.4 “or conception” and “development, analysis”</p>
B	06/02/99	Daniel Myles	<p>Delete present numbering from 5 Definitions and number as follows: 5.1 Product; 5.2 Product identification; 5.3 Product traceability; 5.4 Class 1 equipment; 5.5 Class 2 equipment; 5.6 Class 3 equipment; 5.7 Class 3W equipment; 5.8 Ground support equipment (GSE); 5.9 Special Test equipment/devices (STE/D); 5.10 JSC identification decal (JSC Form 1106); 5.11 JSC project parts tag (JSC Form 911); 5.12 JSC project discrepant parts tag (JSC Form 911R); 5.13 Non-flight equipment.</p> <p>Delete from 5 Definitions 5.6 Ground support equipment (GSE), “delete entire definition”.</p> <p>Add to 5 Definitions 5.6 Class 3 equipment: Equipment acceptable for non-hazardous training or display purposes.</p> <p>Add to 5 Definitions 5.7 Class 3W equipment: Equipment acceptable for use in Water Immersion training in a hazardous</p>

Verify correct version before use at

<http://server-mpo.arc.nasa.gov/Services/CDMSDocs/Centers/JSC/Home.tml>.

Product Identification and Traceability, Change 1 (Formerly SLP 4.8)	JPR No.	1281.8
	Effective Date:	01/29/2008
	Expiration Date:	01/29/2013
	Page Number	Page 10 of 11

			<p>environment (controlled hardware).</p> <p>Add to 5 Definitions 5.8 Ground support equipment (GSE): Non- flight equipment with a physical and/or functional interface with flight hardware that is required for the handling, servicing, inspection, testing, maintenance, alignment, adjustment, checkout, repair, or overhaul of Class1 or Class 2 products.</p> <p>Add to 5 Definitions 5.9 Special Test equipment/devices (STE/D): STE/D are similar to GSE but have not had design and certification reviews. This equipment may be used in support of class 1, 2, 3W and GSE checkout and service BUT will not directly interface with flight hardware.</p> <p>Add to 5 Definitions 5.13 Non-flight equipment: Equipment used to aid in the processing, maintaining, testing, repairing, etc., of flight equipment and all its systems. Non-flight equipment is comprised of GSE, Class 2, Class 3, Class 3W, commercial tools, special test equipment/devices and element tools.</p>
--	--	--	---